

## THE PANAMA CANAL

NUMBER THREE

By ROBERT H. MURRAY.

## SEEING THE DIRT FLY.

CULEBRA, CANAL ZONE, Jan. 30.—Actually to see the dirt fly, as one expects to see it, and appreciate the full meaning of the phrase, one needs to come to the Culebra cut. From a spectacular viewpoint the famous cut offers more to the visitor than any other part of the canal work. Standing on the brink of Contractor's hill, which here bounds the cut on its west side, its deepest part, and facing Culebra hill on the opposite bank, one realizes that he is at the real portal to the Pacific at the gates of rock through which Pacific-faring craft must pass in proceeding from the Atlantic slope of the isthmus to the La Boca entrance to the canal.

Below and to the right and the left, in the narrowing valley that must be gnawed in the tail of the serpent Andes before the oceans may be joined, one watches the pulse of the canal project throbbing at its full. Perhaps twenty of the fifty or more lumbering steam shovels that are clawing away remorselessly to make short shifts of the task of severing the tail of the Andes snake from its body can be seen. These alone would be well worth the trip, for the mission to the greatest show on earth, if one were charged.

As many more well-drilling machines are pecking holes in the trap rock, their drills rising and falling from the tops of the derricks as regularly as the breast rises and falls in placid breathing. Powder men are scurrying to and fro with oblong boxes of white pine filled with dynamite. When you are told what the boxes contain, you begin to grow a bit petulant with the powder men for the apparent carelessness with which they handle them. You inwardly clamor for them to treat those nice yellow boxes—such boxes as might prison innocent tomatoes or corn in the can—with at least the consideration any ordinarily careful person would accord a basket of eggs. But they do not, and yet the boxes, by some miracle, fail to "go off."

I saw one Jamaican darkey start to climb up a steep bank, carrying on his shoulder a box holding sufficient dynamite to reduce him and every one and everything in his immediate vicinity to less than a rag and a bone and a hank of hair had it "let go." It had been raining, and the bank was slippery. The darkey missed his footing, floundered a second, and then rolled to the bottom. Part of the time the darkey was on top; the rest of the time the box was. Nothing happened excepting that the darkey, so near as I could judge from where I stood, was roundly "cussed out" by his foreman. Before my heart resumed its normal gait the man had essayed another attempt at the bank with the box and scaled it successfully.

**How the Dirt Really Flies.**  
Dirt trains are shuttling back and forth, the empty ones that are being loaded by the shovels with vast mounts of earth and rock moving slowly, and the full trains hustling off at top speed to get rid of their loads at the Tabernilla dump, fourteen or fifteen miles distant, or at Miraflores or La Boca.

## Pimples Cannot Live

When The Blood Is Purified With Stuart's Calcium Wafers.

**Trial Package Sent Free.**

Pimples, blotches, eruptions, etc., simply disappear like magic when you shut off the supply of impurities which cause them.

Stuart's Calcium Wafers go into the blood through the same channel as food. They stimulate and nourish it. They destroy foreign and unnatural bodies found there and remove all impurities very quickly.

In many cases pimples and eruptions disappear from the skin in five days. These little wafers are so strong that immediately after they go into the blood their beneficial effects make themselves known. The blood is cleansed rapidly and thoroughly, the impure is separated from the pure blood and the waste matter and poisons are carried from the system.

The person who suffers the humiliation of pimples, blotches and eruptions should know and feel that the blood is in bad condition and delay is quite dangerous, and is liable to affect many organs seriously.

Purify your blood and you give nature the means to successfully fight all manner of disease. Calcium Sulphide is one of the ingredients from which Stuart's Calcium Wafers are made, and it is the strongest and most powerful blood invigorator known to science. This wonderful purifier is endorsed by the entire medical profession and is generally used in all doctor's prescriptions for the blood and skin.

Stuart's Calcium Wafers peculiarly preserve the strength of Calcium Sulphide better than any other—thus giving the most rapid cures owing to the purity of the ingredients and their freedom from decay, evaporation and chemical weakness caused by many later day modes of preparation. Stuart's Calcium Wafers are sold by every druggist. Price 50c, or send us your name and address and we will send you a trial package by mail free. Address F. Stuart, 175 Stuart Bldg., Marshall, Mich.

## A Coat of Paint

Will cover a multitude of defects. Your front porch or your fence or your sheds will look like new if you give them a coat of good paint. But be sure it's good. If you buy it here we'll guarantee it. Phone us your orders.

**SALT LAKE GLASS & PAINT CO.**  
28 MAIN ST.  
Paints, Glass, Oils and Varnish.

**THE CURIOUS**  
—D—  
Curious Compound Capsules combine the virtues of Big G, Pabst O. K., Santal Pepsin, and sell for \$1.25 a box. Mail orders promptly attended to. Doull Drug Co., Distributors, 338 Main St., Salt Lake City.  
None genuine without the trade mark—the Curious D.

closer at hand. The steam shovels were chewing away on four levels with the avidity of a famished dog gobbling a bit of meat scraps, the lower ones on the present bottom of the cut and the others at various stages on the sides. The clank of their serrated steel teeth and their snorts and rumblings tensed intermittently upward through the waves of hot air less regularly and deeper than the measured clamping of the well drills, which are operated by compressed air.

Two or three of the shovels were at sufficiently close range to enable one to admire prodigiously the almost human faculty and initial of their movements; to marvel at the dexterity of the men controlling them. Down would drop the shovel, and, as it fell, its lower jaw was flat on the ground. A bite at the shattered mass of rock and earth past the shovel, and the shovel and the dipper would be full. Three more snorts and the dipper, its jaws clamped closely together, would rise to the height of the dump cars. At the exact moment, with the dipper perhaps still rising and swinging sidewise toward the cars, the "kick man," who sat in a little saddle on one side of the monster's neck would twitch a rope. The jaws unclench and the shovel falls to the bank for another bite. Five bites, or six, will fill a car. Eighty bites, a train.

Some of the shovel operators, seemingly in sportive mood, would occasionally try what they could do at partially loading cars on the fly as they were hauled away. The shovel chews away on it without any more preparation than a hungry rat would require to assault a cheese. In the main, the preliminary blasting prepares the meals of the shovels satisfactorily, so far as the size of the fragments are concerned. Now and then there will be left a rock too big for the shovel to manage. Doby, blasting is then resorted to. That is, blasts are inserted in the top of the rock covered with mud and touched off. The steam shovels must stand and take it. There is no time for them to be pulled out of the way. Experience has taught that it is cheaper to risk the injury to the shovel, and not infrequently they will be battered and torn by rocks as though a battery of field artillery had been trained on them—than it is to remove the rock by the way of flying fragments. This is one indication of how closely Colonel Goethals and his engineers figure on cost.

A steam shovel represents an investment of too considerable a sum to warrant it being idle an unnecessary minute. After watching the picture revealed in the glare of the tropical sun at one's feet at the base of Culebra hill one feels satisfied that he has seen what he wants. He realizes that he has seen the dirt fly.

And what is going on here is in progress for the full nine miles of the rock excavation that is in progress on either side of Culebra hill from Bas Obispo toward the Atlantic to Pedro Miguel on the Pacific slope.

**Out Not the Pacemaker.**

The theory was originally advanced that the length of time required to complete the Culebra cut would mark the maximum period which it would take to finish the canal. But our force has so zealously attacked the trap rock, which for the most part comprises the ridges and mountains comprised in the nine-mile stretch from Bas Obispo to Pedro Miguel, displayed such eagerness and facility to leave all previous records for digging far behind that it seems evident now that this portion of the work will be finished and waiting before the Gatun dam and the Gatun docks have received their final touch.

Take it as it runs, we are excavating in the cut between 60,000 and 70,000 cubic yards of rock and earth a day. The high mark to date is 70,000 cubic yards, achieved for December are not available at present, but Maj. David D. Gaillard, overseeing the central division, gave me an off-hand estimate that it would be not far from 1,700,000 yards in his division alone. In November the total of excavation for the whole work amounted to 2,387,220 yards, of which 1,360,387 was taken from the central division, which includes the cut. The coming March, which will be the driest month in the present dry season, is expected to produce record in excavation. The work will stand permanently in the history of the world. This is because the excavation will reach its high-water mark. By the next dry season operations will be so far advanced, especially in the Culebra cut, that it will perhaps be unnecessary, for economy's sake, to slacken down a bit so as not to run the work in the cut long after the season of the year. The cut will have descended to such a depth as to bring within the range of the shovel in which the steam shovels and laborers will have to operate. It will so lessen the number of shovels and men that will be available.

**Could Make More Speed.**

One learns, considerably to his surprise, if he is not sufficiently versed in engineering to take in the proposition without being pointed out to him, that the canal is not being built as rapidly as it could be. It is being constructed as fast as economical engineering principles allow. Should exigencies arise, such as a war or some equally important consideration, that would render it necessary for the national well-being to put on more steam, the isthmus could be ditched out in 1915. But the extra cost would be enormous, and at the present time it is impossible to foresee a combination of circumstances which would make greater speed either necessary or desirable.

Taking its highest and widest dimensions, the canal from Bas Obispo to Pedro Miguel, through the Culebra cut, will range from 210 feet, which is the highest elevation at which the French began to dig; while across it is, at its highest, 420 feet from bank to bank, and at the bottom from 300 feet in the narrowest portion of the cut to 500 feet wide.

In the beginning there were 50,698,248 cubic yards of material to be excavated. From 1881 to 1904, when we started, the French took out 22,600,000 cubic yards. This represented the easiest part of the work, as it included the earth which overlaid the rock and rock excavation to a depth that did not exceed fifty feet.

Up to June 1 last we had excavated 15,455,426 cubic yards; and of the 29,652,822 cubic yards remaining to be excavated, we are taking out as high as 1,700,000 cubic yards a month, according to Maj. Gaillard's estimate for December.

What these figures mean is their totality strikes one with impressive force as he rides on a dirt wagon through the nine miles of the Culebra cut. The total will be increased somewhat by the recent order issued by the president, upon the recommendation of Colonel Goethals, to increase the width of the cut at its narrowest from 200 to 300 feet.

In the cut are about forty miles of temporary railroad track. It was laid for the use of dirt trains. Digging is no longer a problem than the easy and economical disposal of the spoil. There are numerous dumps, selected for their proximity to the scene of excavation and the ease with which they may be reached, the aim being to run the loaded trains, so far as possible, to the dumps on a down-grade, leaving the upgrade haul to be negotiated by the locomotives with light trains.

**Improving the Railroads.**  
One thing for which the present builders of the canal daily bless the former chief engineers, Wallace and Stevens, was that they brought their practical knowledge as railroad men to bear upon the transportation problem. They tackled the Panama railway, which originally was woefully deficient in capacity and equipment, and set it upon the way to attain a high plane of efficiency. Big American engines by the dozen were purchased, the road was double-tracked and block signals installed. Colonel Goethals has continued the improvement of the railway service until it is now one of the big mainstays. The railway's chief excuse for existence is to serve the Latin American canal commission. In the daytime, aside from passenger service, the road is monopolized by canal work.

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## Bargains at the notion counter

**THE PYTHON HAIR ROLLS**—Soft, fluffy and light—the most durable and perfect hair roll in vogue. The roll best to use in dressing the hair in the new style. Sold in any desired lengths, all colors, the yard ..... **75c**

Se English cotton twill tape, 4 yard spools—3 for 10c.  
15c and 25c finishing braids, fine and dainty patterns—9c.

Children's Hickory horse supporters, wide heavy elastic—15c and 25c.  
35c Ladies' Princess Chic supporters, special—21c.

## Tailored suit models for Spring emphasize the new hipless and empire styles



This season's suit showing more than ever marks our leadership as authoritative style exponents. Correctness characterizes each individual model—styles, material and workmanship possess that typical air of exclusiveness which blends with the wearer's personality and sets her apart as fashionably dressed.

## Spring's tailored hipless suits—\$35.00

At \$35.00 we feature one of the season's latest tailored modes. Designed with the long 36 in. coat in the Empire and elite hipless styles—gored skirts, plain tailored or trimmed with folds. The colors are the new shades of pearl gray, receda, taupe, navy, old rose, copenhagen, shepard plaids and elegant black. The fabrics are serges, panamas and satin striped cloths.

## Tailored styles at \$25.00 and \$27.50

At these popular prices we are showing many new models in tailored suits—garments of the same style and character as the more expensive—though not so fetchingly trimmed.

## Linen tailored waists—\$4.50

The new linen models in strictly tailored waists are quite modish—mannish styles. Some with plain tucked fronts, others are handsomely embroidered—all the season's latest waist creations for Spring wear. Display and sale Monday—\$4.50.

## Net waists—Spring models—\$7.50

At \$7.50 we show two charming and effective new models in net waists. One is a plain tucked mode finished with messaline collar and trimmings—the other is exquisitely tucked and trimmed with delicate shades of Persian braids and buttons. Long sleeve, high collar styles—open front or back—Display and sale Monday—\$7.50.

## Silks and dress goods—Spring fabrics

Beautiful domestic and imported fabrics in the delicate pastel shades, conventional patterns and striking novelties for spring wear. Weaves that readily lend to the vogue of long lines and graceful drapes of the season's fashions. You'll find the right color in the right fabric at the desired price—here. Leaders in fabrics of the better kinds.

## Wash goods—Monday bargains

Bargains that will dominate the department Monday. Wash goods economies that no thrifty, economical shopper can afford to miss.

12½ figured lawn, light and dark grounds, new spring patterns; 2000 yards. Special Monday, the yard ..... **10c**

15c spring percales in light and dark grounds, 36 inches wide, standard quality. Special ..... **12½c**

\$2.00 longcloth, 36 inches wide, 12-yard bolts. The bolt ..... **\$1.65**

45c white poplin, 27-inch. Special Monday, the yard ..... **35c**

12c saphy gingham, high-grade quality, for dresses, etc., in (triple) checks and plain colors; 1500-yard lot. Special, the yard ..... **10c**

Crepé cloth in the new designs for spring; plain colors and figured fancies. The yard ..... **20c**

\$2.75 white nainsook, 36-inch, 10-yard bolts. The bolt ..... **\$2.00**

\$1.25 John S. Brown & Sons' table linen, linen of superior quality, about 800 yards in the lot. Special, the yard ..... **\$1.00**



## Combination undermuslins

Corset cover and drawers—corset cover and skirt.

Hipless is the vogue for spring—combination undermuslins are best suited for this vogue. We feature them in lingerie styles, such as practical and elegant, exclusively feminine. The materials are fine quality nainsook and cambric, the trimmings both embroidery and lace; the acme of lingerie fashion, perfect in fit, fabric and finish. The garment—

**\$1.50 to \$7.50**

## Lingerie—separate garments.

Drawers of fine nainsook in the snug hip-fitting styles; some trimmed with dainty hand embroidery, others elaborate with lace insertion and flounces. The garment—

**75c and 85c**

**\$1.50 to \$5.00**

## Waist trimmings—1-3 less.

For your Spring sewing—We feature Monday one entire line of beautiful lace medallion waist trimmings—white only—in Irish crochet and batiste patterns—Values from 25c to \$2.00—

**1-3 off.**

## Tub braids

The new tub braids for Spring are more varied and beautiful than ever—Dainty dot and figured patterns in the season's wanted colors—1½, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100.

**10c, 15c, 35c**

## Negligee shirts for Spring

New colors—new patterns—nobby styles

There's no question about the style of shirts we sell—they are up to the minute in fit, fabric and finish. Our new spring patterns in dressy negligees are striking examples of the best in shirt making—they are the acme of the season's fashions.

A model that smart dressers like is the new coat shirt with attached cuffs and plaited fronts, in the new shades of tan, green, blue and helio. For more conservative tastes we show plain soft-front styles in conventional shades. The newest styles and patterns, all sizes—\$1.25 to \$3.50.

**"Men's corner."**



## Silk petticoats—colors and styles in vogue for Spring—\$7.50

At \$7.50 we feature a very exceptional value—rich, luxurious, rustling taffeta petticoats in the season's shades of green, blue, navy, brown, lavender, gray, tans, changeable effects and black. New flounced styles, finished with bias ruffles and dust ruffle.

**\$7.50**

## February Clearance Leather goods

\$6.00 to \$23.00 alligator bags of fine quality pearl and horn alligator skins, made in a variety of styles, including the popular sheath and fashionable claw bag; leather lined throughout ..... **1/3 off**

50c coin purses, made of unpolished alligator; the colors are brown, gray, red, tan, etc. February clearance ..... **39c**

\$5.50 to \$6.00 hand purses, made of suede, alligator, pigskin, grained leathers, seal, walrus, etc.; in greens, red, tans, brown, taupe, blue and gray. February ..... **\$1.98**

\$3.00 leather Japanese hand bags, made of tan and dark brown leathers, finished with Japanese characters etched in colors; unique and fashionable ..... **\$1.98**

\$1.79 grained leather hand bags, in black, gun metal trimmings, with coin purse; lined throughout. To clear ..... **\$1.49**

\$1.25 to \$3.00 leather muslin rolls, alligator, suede, grained leather, etc., in colors. February ..... **1/4 off**

## Floral department open Sunday

At our Main street entrance our patrons will be able to purchase flowers Sunday—carnations, American Beauties, violets, etc.

## John Cross oxfords—\$3.50

Quality is the true test of cheapness, no matter what price you pay. That's why John Cross has made famous his \$3.50 shoe. He has built into it a quality that in other makes would cost you \$4.00 or more. The best materials, the best workmanship the up-to-the-minute styles, all substantiate the public's approval. The kind that you will buy again.

We feature the season's new and smart styles in tan and black Russias, vici kid, patent colt, patent kid, etc., and the new shades for spring, the pair ..... **\$3.50**

## Perrin's gauntlets—\$3.50

Gauntlets—the fashionable gloves for spring. Perrin's extra quality cape, suitable for driving, autoing and street wear, in tan, the pair ..... **\$3.50**

## Of interest to the traveler

Traveling cases, jewel cases, tourist bags, etc.—1-4 off.

Tourist's rubber-lined cloth-covered traveling cases with compartments for necessities—a great convenience in traveling. A variety of styles to choose from—values ranging from \$2.25 to \$2.75 ..... **1/4 off**

**Jewel and money cases**

Women's jewel and money cases of soft leather and chamois; clasp pockets; colors are gray and brown; a safe and convenient method of carrying jewels and money; \$1.00 to \$2.50 values ..... **1/4 off**

Men's tourist belts of linen and leather, for carrying money, valuable papers, etc.; \$1.25 to \$1.75 values ..... **1/4 off**

Persian silk jewel case pockets lined with chamois; 75c values ..... **1/4 off**

**Toilet accessory cases**

80c tourist tooth brush case rubber lined, special ..... **10c**

Tourist soap cases, rubber lined, 55c, 50c and 65c values ..... **1/4 off**

Tourist bags, rubber lined, a variety of patterns in leather, from—draw styles, 35c to 45c values ..... **1/4 off**

## Harvard Mill underwear

For women and children.

Our spring shipments of this well known knit underwear have been placed in stock—a full and complete line, showing all the new styles and wanted weights and qualities for spring and summer wear.

Women's suits in cotton and high regular and out sizes; high neck, long sleeves, ankle length; high neck, long sleeves, knee length; high neck, short sleeves, knee length; low neck, short sleeves, knee length; low neck, sleeveless, knee length; also umbrella styles.

Vests in long and short sleeve styles, high and low neck; regular and out sizes.

Tights, umbrellas and tight styles.

Children's union suits, vests and pants, in all styles for spring and summer.